



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/679,836

10/06/2003

Douglas W. Wager

CRNI.108473

3738

46169 7590 08/03/2009
SHOOK, HARDY & BACON L.L.P.
Intellectual Property Department
2555 GRAND BOULEVARD
KANSAS CITY, MO 64108-2613

EXAMINER

RAJ, RAJIV J

ART UNIT

PAPER NUMBER

3686

MAIL DATE

DELIVERY MODE

08/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/679,836	Applicant(s) WAGER ET AL.	
	Examiner RAJIV J. RAJ	Art Unit 3686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 39-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 39-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This action is in reply to the application filed on 20 July 2009.
2. Claims 1, 6, 8, 12-24 and 39-40 have been amended.
3. Claims 25-38 have been canceled.
4. Claims 1-24 & 39-48 are currently pending and have been examined.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. In light of the amendments to claims 1-24 & 40, the previous rejection under 35 U.S.C. 101, is withdrawn.

7. Claim 39 is rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions, a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876). The process steps in claim (39) is not tied to a machine nor do they execute a transformation. Thus, they are non-statutory.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1-5, 7-17, 19-24, & 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe (US 6061657) in view of Pollack (US 5809477) in further view of Andre et al. (US 7155399 B2) (hereinafter Andre).

As per claim 1

Whiting-O'Keefe as shown, teaches the following limitation:

- *Calculating, with a computer processor, a work score for each of the one or more patients utilizing the data;* (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 Fig:9 Items:161-179 & related text)

Whiting-O'Keefe fails to teach the following limitations, however Pollack does:

- *obtaining data for one or more patients directly from a primary clinical information systems* (see at least Pollack Fig:2 Item:210 Fig:3 Item:310 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

Whiting-O'Keefe/Pollack fails to teach the following limitations, however Andre does:

- *wherein the work score indicates a quantity of personnel hours anticipated to serve each of the one or more patients;* (see at least Andre Fig:2 Items:402-428 Fig:3 Item:202-208, 214 Fig:4 Items:310, 320 & related text)
- *storing the work score;* (see at least Andre Claim:13 Fig:3 Item:202-208, 214 & related text)

It would have been obvious to one of ordinary skill in the art to add these features of Andre into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing an improved invention for assessing, determining and implementing appropriate staff to provide the best service for users, such as customers, clients and patients. (see at least Andre Column:2 Lines:52-67 Column:3 Lines:1-3)

As per claim 2

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 1. Whiting-O'Keefe discloses the following limitation:

- *receiving a request for a work score for each of the one or more patients (see at least Whiting-O'Keefe Fig:2 Items:17 & related text)*

As per claim 3

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 2. Whiting-O'Keefe discloses the following limitation:

- *obtaining factors that indicate work for each of the one or more patients (see at least Whiting-O'Keefe Fig:5B Items:53-59 & related text)*

As per claim 4

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 3. Whiting-O'Keefe discloses the following limitation:

- *determining which of the factors are triggered by the data for each of the one or more patients (see at least Whiting-O'Keefe Claim:19)*

As per claim 5

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 4. Pollack discloses the following limitation:

- *each factor has one or more assigned values (see at least Pollack Column:17 Line:67 & Column:18 Lines:1-5 "At Item 320, a numerical value based on patient information is assigned for each category of diagnostic information and for each group of categories. Rules and guidelines for the assignment of numerical values are set forth in the detailed descriptions of the scoring methodologies set forth above")*

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 7

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 5. Whiting-O'Keefe discloses the following limitation:

- *obtaining rules for generating a work score for each of the one or more patients*
(see at least Whiting-O'Keefe Column:8 Lines:45-62)

As per claim 8

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 7. Whiting-O'Keefe discloses the following limitation:

- *utilizing the rules of factors triggered by the data values to generate a work score for each of the one or more patients;* (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 & related text)

As per claim 9

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 1. Whiting-O'Keefe discloses the following limitation:

- *the data is one of outstanding orders, outstanding tasks, completed orders, completed tasks, services provided by personnel over a period of time,*

scheduled procedures, scheduled outpatient care, assigned tasks, assigned orders, assessments, tasks, services typically delivered for a specific patient or patient type and combinations thereof (see at least Whiting-O'Keefe Column:4 Lines:50-67)

As per claim 10

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 1. Whiting-O'Keefe discloses the following limitation:

- *wherein the work score is prospective (see at least Whiting-O'Keefe Fig:10 Items:193 & related text)*

As per claim 11

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 1. Whiting-O'Keefe discloses the following limitation:

- *wherein the work score is retrospective (see at least Whiting-O'Keefe Fig:10 Items:191 & related text)*

As per claim 12

Whiting-O'Keefe as shown, teaches the following limitation:

- *calculating, with the processor, a work score for each patient in a patient population, utilizing data obtained directly from a primary clinical information system; (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 Fig:9 Items:161-179 & related text)*

Whiting-O'Keefe fails to teach the following limitations, however Pollack does:

- *calculating staffing needs for the population based on the work scores obtained for the patients in the patient population* (see at least Pollack Claim:1 (b)-(d))

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

Whiting-O'Keefe/Pollack fails to teach the following limitations, however Andre does:

- *wherein the work score indicates a quantity of personnel hours anticipated to serve each of the one or more patients;* (see at least Andre Fig:2 Items:402-428 Fig:3 Item:202-208, 214 Fig:4 Items:310, 320 & related text)
- *storing the work score;* (see at least Andre Claim:13 Fig:3 Item:202-208, 214 & related text)

It would have been obvious to one of ordinary skill in the art to add these features of Andre into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing an improved invention for assessing, determining and implementing appropriate staff to provide the best service for users, such as customers, clients and patients. (see at least Andre Column:2 Lines:52-67 Column:3 Lines:1-3)

As per claim 13

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 12. Whiting-O'Keefe discloses the following limitation:

- *receiving a request for the work score for the patient population;* (see at least Whiting-O'Keefe Fig:1 A-C)

As per claim 14

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 13. Whiting-O'Keefe discloses the following limitation:

- *determining the patients in the population;* (see at least Whiting-O'Keefe Fig:3 Item:31)

As per claim 15

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 14. Whiting-O'Keefe discloses the following limitation:

- *obtaining the work factors for the population* (see at least Whiting-O'Keefe Fig:3 Item:33-37)

As per claim 16

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 15. Whiting-O'Keefe discloses the following limitation:

- *determining which of the factors are triggered by the data for each patient in the population;* (see at least Whiting-O'Keefe Claim:20 "solving an estimate model of a total amount of charges for the encounters within a summary record as a function of a plurality of model variables and regression coefficients taken or

derivable from the data within said at least one summary record, said regression coefficients having been previously determined with the same estimate model to optimize a fit of said estimate model for a population of patients with data within a summary record corresponding to said at least one summary record)

As per claim 17

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 15. Pollack discloses the following limitation:

- *wherein each factor has an assigned value* (see at least Pollack Column:17

Line:67 & Column:18 Lines:1-5 "At Item 320, a numerical value based on patient information is assigned for each category of diagnostic information and for each group of categories. Rules and guidelines for the assignment of numerical values are set forth in the detailed descriptions of the scoring methodologies set forth above")

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 19

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 17. Whiting-O'Keefe discloses the following limitation:

- *obtaining rules for generating a work score for each patient in the population (see at least Whiting-O'Keefe Column:8 Lines:45-62)*

As per claim 20

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 19. Whiting-O'Keefe discloses the following limitation:

- *utilizing the rules and values of factors triggered by the data to generate a work score for each patient in the population; (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 & related text)*

As per claim 21

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 20. Whiting-O'Keefe discloses the following limitation:

- *accumulating the work scores for all patients in the population; (see at least Whiting-O'Keefe Claim:17)*

As per claim 22

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 21. Pollack discloses the following limitation:

- *obtaining staffing standards for the population (see at least Pollack Fig:2 Items:220 Fig:6 Items:645 & related text)*

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of

providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 23

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 22. Pollack discloses the following limitation:

- *calculating staffing needs based on the work scores obtained for the patients in the patient population and the staffing standards for the population;* (see at least Pollack Claim:1 (b)-(d))

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 24

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 12. Whiting-O'Keefe discloses the following limitation:

- *the data is one of outstanding orders, outstanding tasks, completed orders, completed tasks, services provided by personnel over a period of time, scheduled procedures, scheduled outpatient care, assigned tasks, assigned orders, assessments, tasks, services typically delivered for a specific patient or patient type and combinations thereof* (see at least Whiting-O'Keefe Column:4 Lines:50-67)

As per claim 39**Whiting-O'Keefe as shown, teaches the following limitation:**

- *utilizing the data to calculate a work score for the one or more patients; (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 & related text)*

Whiting-O'Keefe fails to teach the following limitations, however Pollack does:

- *obtaining data for one or more patients directly from a primary clinical information systems (see at least Pollack Fig:2 Item:210 Fig:3 Item:310 & related text)*

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

Whiting-O'Keefe/Pollack fails to teach the following limitations, however Andre does:

- *wherein work includes a measure of personnel hours anticipated for the one or more patients; (see at least Andre Fig:2 Items:402-428 Fig:3 Item:202-208, 214 Fig:4 Items:310, 320 & related text)*

It would have been obvious to one of ordinary skill in the art to add these features of Andre into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing an improved invention for assessing, determining and implementing appropriate staff

to provide the best service for users, such as customers, clients and patients. (see at least Andre Column:2 Lines:52-67 Column:3 Lines:1-3)

As per claim 40

Whiting-O'Keefe as shown, teaches the following limitation:

- *calculating, with a computer processor, a work score for each patient in a patient population utilizing data obtained directly from a primary clinical information system;* (see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 Fig:9 Items:161-179 & related text)

Whiting-O'Keefe fails to teach the following limitations, however Pollack does:

- *calculating staffing needs for the patient population based on the work scores obtained for the each patient in the patient population* (see at least Pollack Claim:1 (b)-(d))

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

Whiting-O'Keefe/Pollack fails to teach the following limitations, however Andre does:

- *wherein the work score is a quantity of personnel hours required to serve each patient in the patient population by a healthcare provider;* (see at least Andre Fig:2 Items:402-428 Fig:3 Item:202-208, 214 Fig:4 Items:310, 320 & related text)

- *storing the work score*; (see at least Andre Claim:13 Fig:3 Item:202-208, 214 & related text)

It would have been obvious to one of ordinary skill in the art to add these features of Andre into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing an improved invention for assessing, determining and implementing appropriate staff to provide the best service for users, such as customers, clients and patients. (see at least Andre Column:2 Lines:52-67 Column:3 Lines:1-3)

11. Claims 6 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Pollack in view of Andre in further view of Richardson et al. (US 6193654 B1) (hereinafter Richardson).

As per claim 6

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 5. Richardson further discloses the following limitation:

- *adjusting the value of one or more factors triggered by the data based on rules*; (see at least Richardson Claim:19 (g) "At Item 320, a numerical value based on patient information is assigned for each category of diagnostic information and for each group of categories. Rules and guidelines for the assignment of numerical values are set forth in the detailed descriptions of the scoring methodologies set forth above")

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing optimal healthcare through accurate monitoring of medical parameters. (see at least Richardson Column:3 Lines:36-48)

As per claim 18

The combination of Whiting-O'Keefe/Pollack/Andre discloses all of the limitations of claim 17. Richardson further discloses the following limitation:

- *adjusting the value of one or more factors triggered by the data;* (see at least Richardson Claim:19 (g) "At Item 320, a numerical value based on patient information is assigned for each category of diagnostic information and for each group of categories. Rules and guidelines for the assignment of numerical values are set forth in the detailed descriptions of the scoring methodologies set forth above")

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack/Andre. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack/Andre with the motivation of providing optimal healthcare through accurate monitoring of medical parameters. (see at least Richardson Column:3 Lines:36-48)

12. Claims 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Zaleski (US 2003/0101076 A1).

As per claim 41**Whiting-O'Keefe as shown, teaches the following limitation:**

- *a work calculation module for calculating a work score for one or more patients;*
(see at least Whiting-O'Keefe Fig:2 Items:17-29 Fig:3 & related text)

System claim 41 repeats the subject matter of method claim 1 respectively, as a system rather than a series of steps. As the underlying process of claim 1 has been shown to be fully disclosed by the teachings of Whiting-O'Keefe in the above rejection of claim 1, it is readily apparent that the limitations disclosed by Whiting-O'Keefe include the apparatus to perform these functions. As such, these limitations are rejected for the same reasons given above for method claim 1 and incorporated herein.

- *a demand forecast module for forecasting the volume and type of patients who will present;* (see at least Whiting-O'Keefe Fig:3 Items:43-45 & related text)
- *a resource dashboard module for displaying information regarding personnel and patients* (see at least Whiting-O'Keefe Fig:9 Items:163, 175-179 & related text)

Whiting-O'Keefe fails to teach the following limitations, however Zaleski does:

- *a staff scheduling and staffing module for identifying healthcare personnel positions to be filled;* (see at least Zaleski [0007], Fig:1 Items:108, 109 & related text)
- *role management module for managing the roles and information regarding personnel;* (see at least Zaleski [0005]-[0007])

- *a workforce outcomes module for determining how effectively healthcare personnel have been used; (see at least Zaleski [0005]-[0007])*

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe. One of ordinary skill in the art would have added these features into Whiting-O'Keefe with the motivation of providing system for improved clinical decision making, in order to provide more efficient and effective healthcare. (see at least Zaleski [0012])

13. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Zaleski in further view of Ross, Jr. et al. (US 7076436 B1) (hereinafter Ross).

As per claim 42

The combination of Whiting-O'Keefe/Zaleski discloses all of the limitations of claim 41. Ross further discloses the following limitation:

- *an enterprise scheduling module for identifying information regarding appointments for outpatient procedures (see at least Ross Fig:4 Items:102, 116-118 & related text)*

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Zaleski with the motivation of providing more accuracy of patients and medical resources in order to allow more effective care by hospital personnel. (see at least Ross Column:1 Lines:9-13)

As per claim 43

The combination of Whiting-O'Keefe/Zaleski discloses all of the limitations of claim 42. Ross further discloses the following limitation:

- *an enterprise scheduling module for identifying information regarding appointments for outpatient procedures (see at least Ross Fig:7 Items:138 & related text)*

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Zaleski with the motivation of providing more accuracy of patients and medical resources in order to allow more effective care by hospital personnel. (see at least Ross Column:1 Lines:9-13)

14. Claims 44 & 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Zaleski, in view of Ross, in further view of Richardson.

As per claim 44

The combination of Whiting-O'Keefe/Zaleski/Ross discloses all of the limitations of claim 43. Richardson further discloses the following limitation:

- *a registration module for identifying and tracking patient registration, census and activity (see at least Richardson Column:6 Lines:45-54)*

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Pollack. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Pollack with the motivation of providing

optimal healthcare through accurate monitoring of medical parameters. (see at least Richardson Column:3 Lines:36-48)

As per claim 45

The combination of Whiting-O'Keefe/Zaleski/Ross/Richardson discloses all of the limitations of claim 44. Whiting-O'Keefe further discloses the following limitation:

- *a medical records module for capturing and storing patient data* (see at least Whiting-O'Keefe Column:7 Lines:34-47 Fig:9 Items:161-179 & related text)

15. Claims 46 & 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Zaleski, in view of Ross, in view of Richardson, in further view of Pollack.

As per claim 46

The combination of Whiting-O'Keefe/Zaleski/Ross/Richardson discloses all of the limitations of claim 45. Pollack further discloses the following limitation:

- *a patient severity module for providing information regarding the status and conditions of patients* (see at least Pollack Column:9 Lines:49-51, Fig:3, & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski/Richardson/Ross. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Zaleski/Richardson/Ross with the motivation of providing higher quality medical care while being more efficient with medical resources. (see at least Pollack Column:3 Lines:30-38)

As per claim 47

The combination of Whiting-O'Keefe/Zaleski/Ross/Richardson discloses all of the limitations of claim 46. Ross further discloses the following limitation:

- *a departmental tracking module for tracking patients through different departments* (see at least Ross Fig:2 Item:102 & related text)

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski/Richardson/Ross. One of ordinary skill in the art would have added these features into Whiting-O'Keefe/Zaleski/Richardson/Ross with the motivation of providing more accuracy of patients and medical resources in order to allow more effective care by hospital personnel. (see at least Ross Column:1 Lines:9-13)

16. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting-O'Keefe in view of Zaleski, in view of Ross, in view of Richardson, in view of Pollack, in further view of Brandt et al. (US 2003/0050797 A1) (hereinafter Brandt).

As per claim 48

The combination of Whiting-O'Keefe/Zaleski/Ross/Richardson/Pollack discloses all of the limitations of claim 47. Brandt further discloses the following limitation:

- *a personal work queue module for tracking and displaying work to be performed by individual personnel* (see at least Brandt [0005])

It would have been obvious to one of ordinary skill in the art to add these features into Whiting-O'Keefe/Zaleski/Ross/Richardson/Pollack. One of ordinary skill in the

art would have added these features into Whiting-O'Keefe/Zaleski/Ross/Richardson/Pollack with the motivation of providing optimal workflow management in a healthcare setting for efficient and effective healthcare for patients. (see at least Brandt [0004])

Response to Arguments

17. Applicant's arguments received on 20 July 2009 have been fully considered but they are not persuasive. Applicants' arguments will be addressed herein below in the order in which they appear in the response filed 20 July 2009.

18. In response to applicant's argument that the cited prior art is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

19. In response to applicant's argument regarding the claim language "*calculating, with a computer processor, a work score for each of the one or more patients utilizing the data*", the Examiner points out that this is new claim language, and is appropriately addressed in this Office Action.

20. In response to applicant's argument that "estimate healthcare charges" and "calculating" are patently distinct, the Examiner has fully considered applicant's arguments and finds them unpersuasive & respectfully disagrees.

21. In response to applicant's argument that Andre is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). Further, Examiner points out that Andre does disclose the cited claim limitations.

22. In response to applicant's argument regarding claim language "*the work score indicates a quantity of personnel hours anticipated to serve each of the one or more patients*" the Examiner has fully considered applicant's arguments and finds them unpersuasive. Examiner points out that Andre is designed to calculate effective staffing levels for various tasks, which discloses calculating "*quantity of personnel hours to serve a patient*". (Andre: Abstract)

23. Applicant's arguments for claims 2-5 & 7-11 are based on the dependency of claim 1, and thus are rejected for the same reason(s).

24. Applicant's argument(s) for claim 39 are substantially similar to Applicant's arguments for claim 1, and thus are rejected on the same grounds.

25. Applicant's argument(s) for claim 12 are substantially similar to Applicant's arguments for claim 1, and thus are rejected on the same grounds.

26. In response to applicant's argument regarding the claim language "*calculating, with the processor, a work score for each patient in a patient population*" the Examiner points out that this is new claim language, and is appropriately addressed in this Office Action.

27. In response to applicant's argument regarding that the cited prior art fails to disclose determining "a patient's length of stay nor the number or availability of hospital beds in anyway teaches or suggest '*calculating staffing needs for the population based on the work scores . . .*,'" Examiner has fully considered applicant's arguments and finds them unpersuasive. Examiner respectfully points out that the cited prior art does disclose determining the resources needed to care for a patient.

28. Applicant's arguments for claims 13-17 & 19-24 are based on the dependency of claim 12, and thus are rejected for the same reason(s).

29. Applicant's argument(s) for claim 40 are substantially similar to Applicant's arguments for claim 1 & 12, and thus are rejected on the same grounds.

30. Applicant's arguments for claims 6 & 18 are based on the dependency of claims 1 & 12 respectively, and thus are rejected for the same reason(s).

31. In response to applicant's argument that Zaleski is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention.

See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). Further, Examiner points out that Zaleski does disclose the cited claim limitations.

32. Applicant's argument(s) for claim 41 are substantially similar to Applicant's arguments for claim 1 & 12, and thus are rejected on the same grounds.

33. Applicant's arguments for claims 42-78 are based on the dependency of claim 41, and thus are rejected for the same reason(s).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Rajiv J. Raj** whose telephone number is **(571) 270-3930**. The Examiner can normally be reached on Monday-Friday, 7:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Jerry O'Connor** can be reached at **571.272.6787**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to **(571) 273-8300**.

Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window:**

Randolph Building

401 Dulany Street

Alexandria, VA 22314.

Date: 07/30/09

/RJR/

Patent Examiner Art Unit 3686

/Gerald J. O'Connor/
Supervisory Patent Examiner
Group Art Unit 3686